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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,808	11/21/2002	Alain Blanc	FR920010070	7979

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INTELLECTUAL PROPERTY LAW
1000 RIVER STREET
972 E
ESSEX JUNCTION, VT 05452

EXAMINER

WILSON, ROBERT W

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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08/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/065,808	Applicant(s) BLANC ET AL.	
	Examiner Robert W. Wilson	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/10/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novick (U.S. Patent No.: 6,980,513) in view of Lyon U.S. Patent No.: 6,721,273) further in view of Fan (U.S. Patent No.: 7,042,883) .

Referring to claim 9, Novick teaches a method for serving queues by a queue scheduling mechanism in a data packet transmission system.

a) Please refer to Figure 1 for a data packet transmission system providing a transmission device (mixed traffic multiplexer 14 per Fig 1) for transmitting data packets, a set of queue devices (queues 16, 18, 20, 22, 26, 28, 30, & 32 in Figure 1) respectively associated with a set of priorities each defined by a priority rank for storing each of data packet transmitted by said transmission device into the queue device corresponding to one of said priority rank, and a queue scheduler (scheduler 34 in Figure 1) for reaching, at each packet cycle, a data packet in one of said queue determined by a normal priority preemption algorithm (best effort for low priority multiplexer 12).

b) receiving from a credit device (MCR list 36 in Figure 1. col. 3 lines 36-37) at each packet cycle a value N (MCRR 16a, 18a, 20a, & 22a in Figure 1) defining the priority rank to be considered by said queue scheduler (col. 4 lines 5-8, steps 102 and 104 of Figure 2) , the considered priority rank is selected based on a pre-determined value related to all of said priority ranks which are associated with said queue scheduling mechanism (col. 4 lines 8-13) and priority ranks comprise high priority (High Priority per Fig1) and low priority (Low Priority per Fig 1)

d) determining whether said data packet corresponding to the priority rank N is in said queue device corresponding to the priority rank N (col. 4 lines 19-22, "first non-empty connection queue") and

e) wherein said data packet corresponding to priority rank N is in said queue device corresponding to the priority rank N, reading said data packet corresponding to priority rank N by said queue scheduler from said queue device corresponding to the priority rank N instead of said queue device determined by the normal priority preemption algorithm (col. 4 lines 19-24,

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30-34; steps 110-130 in Figure 2) Novick does not specifically disclose the reception device in the system, but it is inherent in this reference because a transmitter cannot transmit data if there is not a receiver.

Novick does not expressly call for: b) obtaining authorization to send a data packet corresponding to the priority rank N or single queue scheduling mechanism

Lyon teaches a method for traffic flow control in a data switch; wherein a flow control message is used to control the input scheduler's activities (grant transmission or discard data) from the output (reception) buffer (Figures 1, 3, & 6 per col. 5 lines 22-27; col. 6 lines 2-9, 32-37; col. 7 lines 39-53)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the function of receiving a grant signals before transmission as taught by Lyon to the method of Novick in order to avoid congestion in the communication switch and achieve better traffic flow control

The combination of Novick and Lyon do not expressly call for: single queue scheduling mechanism

Fan teaches: single queue scheduling mechanism (Figure 4 and per col. 5 lines 28-51)

It would have been obvious to add the single scheduling mechanism of Fan in place of the two schedulers of the combination of Novick and Lyon in order to save space in the device by integrating the two schedulers into a single scheduler.

In addition Novick teaches:

Regarding claim 10, wherein steps b-e) are repeated iteratively until a pre-determined condition is satisfied (the steps are repeated iteratively until a predetermined condition is satisfied (col. 4 lines 34-38; Figure 2 step 132 to 114, until the service interval runs out)

Regarding claim 11, the combination of Novick, Lyon, and Fan teach the single queue scheduler and Novick teaches: wherein authorization to send said data packet corresponding to the priority rank N is not obtained or when said data packet corresponding to the priority rank N is not obtained or when said data packet corresponding to the priority rank N is not in said queue device corresponding to the priority rank N, performing a step of reading a data packet by said single queue scheduler from said queue device (If no queue is available for priority rank N performing a step of reading a data packet by said queue scheduler from said queue device determined by the normal priority preemption algorithm (col. 4 lines 30-34; wherein if CCR count reaches zero, serves best effort services)

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Regarding claim 12, wherein said priority ranks comprise both a highest priority rank (inherent in high priority ranks) and a lowest priority (inherent in lower priority) rank from among said all of said priority ranks (Figure 1)

Response to Amendment

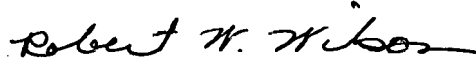
3. Applicant's arguments with respect to claims 9-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571/272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Robert W Wilson
Examiner
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